

WHAT IS CLAIMED IS:

1. A process of manufacturing a roll punch used for forming partition walls of a plasma display panel, comprising
5 the steps of:

coating a mask on an external surface of a forming roll;
partially removing the mask from said forming roll at
regularly spaced positions while rotating said forming roll,
thus forming an intermediate product having a plurality of
10 regularly spaced mask-free parts;

etching said intermediate product at the mask-free parts
using ultrasonic waves within an etching tank provided with an
ultrasonic vibrator, thus forming a plurality of partition wall
forming grooves on said forming roll of the intermediate
15 product; and

completely removing a remaining part of said mask from the
forming roll having the partition wall forming grooves, thus
finally producing a roll punch.

20 2. The process according to claim 1, wherein the partial
removal of said mask from the forming roll at the regularly
spaced positions is carried out by radiating a laser beam on
the mask.

25 3. The process according to claim 1, wherein the partial

removal of said mask from the forming roll at the regularly spaced positions is carried out by a cutting bite.

4. The process according to claim 1, wherein an inclination angle of each inclined sidewall of each of said partition wall forming grooves of the roll punch relative to a vertical reference line perpendicular to an external surface of lands between said forming grooves is 3° or less.

5. The process according to claim 1, wherein the partition wall forming grooves of the roll punch are fabricated such that a value of $[h/(b-a)]$ is 30 or more, wherein "h" is a height of each of the partition walls formed on the plasma display panel by said forming grooves of the roll punch, "b" is a width of a middle portion of said partition wall, and "a" is a width of a top portion of said partition wall.

Add
A27